



As we grow older, our vision will change, and with it the visual perception of our surroundings. The purpose of this whitepaper is to pass on some of the reference materials we have discovered and address concerns with proposed solutions.

Aging and Your Eyes

As we age, various changes in our eyes will result in reduced visual acuity and difficulty adjusting to changes in lighting. Our retinas will become less sensitive to contrast making it difficult to distinguish between objects effecting depth perception. Seniors have additional challenges with sensitivity to glare, diminished peripheral vision, and difficulties with color perception. Losing flexibility in the lenses will result in difficulty focusing.

Your risk for eye diseases and conditions increases as you grow older, and some eye changes need to be addressed to allow you to age in your home. More than 70% of the over-75 years of age population are at risk of developing cataracts. There are no symptoms, other than a gradual loss of vision. Age-related macular degeneration (AMD) can harm the sharp, central vision needed to see objects clearly and to do common things like driving and reading. Diabetic Retinopathy (DR) may occur if you have diabetes. It develops slowly, often with no early warning signs. Glaucoma is usually caused by too much fluid pressure inside the eye. If not treated, it can lead to vision loss and blindness.

The National Institute of Aging recognizes the condition of Low Vision. Low vision means you cannot fix your eyesight with glasses, contact lenses, medication, or surgery. Low vision affects some people as they age. You may have low vision if you:

- Can't see well enough to do everyday tasks like reading or cooking
- Have difficulty recognizing the faces of your friends or family
- Have trouble reading items at a distance
- Find that lights don't seem as bright

It is discouraging to think about these things, but with forethought and an understanding of the vision related difficulties, Helping Hands Living Solutions is focusing on providing solutions to help maintain your quality of life.





The Risk of Falling

When our vision starts to change we will build new habits to evolve with the disability. Over time we may not realize that our clouded vision has continuously increased our risk of falling. Our vision is a safety concern, but the risk of falling is devastating to our ability to age in our homes. Falls are the leading cause of injury for adults ages 65 years and older. The CDC states that “Each year, millions of older people—those 65 and older—fall. In fact, more than one out of four older people fall each year, but less than half tell their doctor. Falling once doubles your chances of falling again. Falls among adults 65 and older caused over 38,000 deaths in 2023, making it the leading cause of injury death for that group.”



Helping Hands Living Solutions is your partner to ease the concerns of having a fall in your home. It is not possible to make an entire living space safe, but eliminating some of the bigger threats will go a long way to making it safer. The structure of our house can present tripping hazards. Look at providing vision aids around steps, sharp corners, or step down areas.

If a fall does occur, peace of mind solutions will need to be evaluated for use in your home. Falls can cause broken bones, like wrist, arm, ankle, and hip fractures, which we can optimize your home to deal with. Traumatic Brain Injury (TBI) after a fall requires additional solutions in the home.




Mobility

With the loss of vision, focus must be made on improving our mobility in the home. Moving safely in the home is a combination of concerns to address as we age, with vision loss as a force multiplier. Helping Hands Living Solutions encourage you to address items that keep your mobility at its peak:


- Begin an exercise program to improve your leg strength and balance.
- Talk openly with your healthcare provider about fall risks and prevention.
- Ask your doctor or pharmacist to review your medicines.
- Get an annual eye exam and replace eyeglasses as needed.
- Take care of your mental health, cognition, judgement, and dementia.
- Get a hearing exam, untreated hearing loss may cause balance issues.

The CDC provides the MyMobility Plan; tools to help you plan for mobility changes and take action now. This planning guide includes checklists, tips, and resources to help you stay safe and mobile in the years to come.




MyMobility Tip

The lenses used for reading in bifocal glasses change how you judge step heights and can lead to falls. Consider using a second pair of single lens glasses to prevent falls when outside of the home.



MyMobility Tip

Falls are more likely when you are wearing socks indoors or footwear that does not cover the heel, such as flip flops. Wear safe shoes that fit well, with a firm heel to provide stability, and a textured sole to prevent slipping—even when inside your home.



MyMobility Tip

Think about how a computer or phone can be used to:

- Have prescriptions or groceries delivered
- Check in with your doctor or other healthcare provider
- Connect with friends and family

Helping Hands Living Solutions has many ideas to ensure you can maintain mobility while addressing vision loss:

- Remove the clutter; install storage solutions, get items off the floor.
- Maintain yard wide walking areas through the home.
- Secure all loose rugs and floor coverings.
- Smooth thresholds and uneven areas around the home.
- Have grab bars and balance aids in key locations.
- Apply anti-slip adhesives to areas that risk being wet
- Add railings to both sides of stairs
- Consider Mobility Assist Devices such as stair lifts and ramps
- Soften Hard Surfaces (heavy rubber mats, corner protectors)



Lighting

As vision fades the need for brighter lighting is required. Light your path and watch where you put your feet, and you have built a habit that will reduce your risk of falling. Start by thinking to increase lighting brightness to compensate for reduced sensitivity to light.

Adequate lighting is essential for seniors with aging eyes. Helping Hands Living Solutions have many solutions for you to consider:

- Utilize natural light whenever possible by keeping blinds and curtains open during the day. Seating areas near windows benefit from natural illumination, which is easier on the eyes.
- Provide task lighting targeted for specific tasks such as reading, cooking, crafts, or entertainment. Smart Home lighting will allow for task lighting to be set by command in the home. Having the right lighting at the right time is not just a good solution to aid your vision; it is a quality of life feature that is easily obtained.
- Motion sensitive lights that turn on when you enter a room with low level lighting through the home will ensure you have adequate lighting in low light times of day. Put nightlights in hallways, bathrooms, and near staircases that might need to be walked through at night.
- A consistent level of brightness through the home is needed as older eyes need more time to adjust. A dimmer light switch in the bathroom can soften the contrast between light and darkness. Uniform lighting throughout the home will minimize shadows and enhance visibility.
- Glare from shiny floor surfaces as well as daylight shining brightly through windows will cause visual discomfort. Place light sources away from a direct line of sight or use lampshades, diffusers to soften and scatter light. Try to use non-reflective or matte surfaces for walls, furniture, and flooring.



Contrast and Depth Perception

In order for us to perceive our surroundings, our eyes need to work together to process visual signals and transmit this information to the brain. For older adults, age makes this process less smooth and alters depth perception. Aging vision can affect how you understand size, distance, color and contrasts. Objects can blend together or appear less clear, while shadows and distance aren't always defined. For aging people, this can result in misjudging distances, accidentally tripping over objects or reaching for something that isn't there. Common indications include:

- Misjudging how far away an object is
- Misjudging size and depth of objects
- Decreasing contrasts, which affect how defined objects appear
- Not distinguishing borders and boundaries

Reduced contrast sensitivity makes it difficult to differentiate similar colors and patterns. Visual depth illusions induced by repeating patterns that occur on stair treads and elsewhere, when coupled with declines in motor control and strength, results in the elderly being more susceptible to falls.

Helping Hands Living Solutions has chosen multiple solutions that will enhance contrast to improve object visibility. The home owner can likewise use contrasting colors for furniture and walls to make them easily distinguishable. Together we can discuss potential vision concerns and provide solutions. Some items we will look to address:

- Stairs treads will have a contrasting edge applied
- Light-colored walls can have dark-colored switches and electrical outlets
- Contrast colors for door knobs and grab bars
- Vertical surfaces with like colors given a contrasting edge
- Door frames can provide adjoining rooms a contrasting color
- Outside walkways can be smoothed and leveled
- Contrasting colors pathways on the floor, use solid colors
- Parking Aids can be installed in the garage
- Cutting boards with a light and a dark side to contrast whatever you slice.

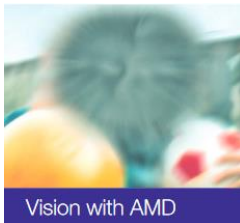




Low Vision

Low vision makes it hard to do everyday activities. It can't be fixed with glasses, contact lenses, or other standard treatments like medicine or surgery. The type of low vision that you have depends on the disease or condition that caused your low vision. The most common types of low vision are:

- Central vision loss (not being able to see things in the center of your vision)
- Peripheral vision loss (not being able to see things at your sides)
- Night blindness (not being able to see in low light)
- Blurry or hazy vision



Vision with AMD



Vision with cataracts



Vision with DR



Vision with glaucoma

If you have low vision, Helping Hands Living Solutions can find ways to keep doing the things you love to do. If your vision loss is minor, you may be able to make small changes to help yourself. You can use brighter lights, wear anti-glare sunglasses, and use a magnifying lens for reading and other up-close activities

There are a huge number of adaptive devices that can be installed in your home to make it easier for to get around and be safe in the house. Home modifications like touchless faucets that turn off automatically, floor-level LED lighting, motion sensing lights, and

There are plenty of smart devices now that have built-in functionality that will help seniors do the things they want to do even if their vision is limited. Voice command devices throughout the home will control Smart Devices, and allow for vision to not be needed to maintain your environment. A few ideas are:

- Smart doorbells that will announce when someone is at the door
- Smart Display that can be magnified or viewed on a Smart TV
- Pan / Tilt / Zoom Security Cameras in Garage and outside home
- Smart Lighting commands for time of day and specific tasks
- Smart Door Locks and Smart Garage Door
- Water leak and other hazard monitoring devices



Improvise, Adapt, and Overcome

We are all aging, and obstacles are a constant in life. Concerning your vision, we will install quality of life features, change habits, and address aging in your home directly with forethought and understanding. It will be tough to get old, and realities need to be faced. Our biggest concern is the risks of falling associated with poor vision. Next, your vision aging in place solution can focus on quality of life, and addressing your vision needs with unique solutions and technology.

Helping Hands Living Solutions greatest value to you is to provide peace of mind as you build strategies to age in your home. Everyone is going to have different needs, and need specific solutions to address the home for aging. We will continue to study aging vision concerns, work with our customers, and provide the best home remodeling advice we can. The information in this whitepaper, including text, graphics, images, and information is general in nature and not intended as medical or legal advice. Sadly, we cannot assume any responsibility for the accuracy of the information contained.

Helping Hands Living Solutions encourages you to confirm any information and form your own opinions.



Helping Hands

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